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Article:

WILLIAMS, C.C. orcid.org/0000-0002-3610-1933 and KOSTA, B. (2020) Evaluating the impact of informal sector competitors on the perfomance of formal enterprises: Evidence from Bosnia and Herzegovina. Journal of Developmental Entrepreneurship. ISSN 1084-9467

https://doi.org/10.1142/s1084946720500144

Journal of Developmental Entrepreneurship

EVALUATING THE IMPACT OF INFORMAL SECTOR COMPETITORS ON THE PERFORMANCE OF FORMAL ENTERPRISES: EVIDENCE FROM BOSNIA AND HERZEGOVINA

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Received February 2020
Revised May 2020

It is widely assumed that informal sector enterprises have a harmful impact on the performance of formal enterprises. This paper aims to provide an evidence-based evaluation of whether this is the case. To do so, it reports World Bank Enterprise Survey (WBES) data collected from 360 formal enterprises in Bosnia and Herzegovina in 2019. The finding is that formal enterprises viewing informal competition as a severe obstacle do not witness significantly lower sales growth, employment growth or productivity growth. Indeed, such enterprises witness significantly higher sales growth than those who do not view informal sector competitors as a severe obstacle. The theoretical and policy implications are discussed.

Keywords: Entrepreneurship; informal sector; firm performance; Bosnia and Herzegovina.

1. Introduction

Do formal enterprises who view informal sector competition as a severe obstacle to their operations suffer from lower levels of firm performance? In recent years, the discipline of entrepreneurship has witnessed the emergence of a small but burgeoning new sub-discipline that investigates entrepreneurship in the informal sector. These are enterprises and entrepreneurs who do not register with, and/or declare some or all production and/or sales to, the authorities for tax, benefit and/or labor law purposes when they should do so (Chepurenko, 2018; Karki and Xheneti, 2018; Khan, 2017; Linares, 2018; Williams *et al.*, 2013, 2015, 2017). Given that over half of all enterprises globally operate on an unregistered basis (Acs *et al.*, 2013), and an even higher proportion under-report sales (Williams, 2017), entrepreneurship in the informal sector represents the majority of entrepreneurship worldwide.

Reviewing this burgeoning literature on informal entrepreneurship, a widespread assumption is that informal sector enterprises and entrepreneurs represent unfair competition for formal enterprises and entrepreneurs and have a deleterious impact on the firm performance of formal enterprises (Leal Ordóñez, 2014; Lewis, 2004; Webb *et al.*, 2009, 2013; Williams, 2017). The aim of this paper is to provide an evidence-based evaluation of whether enterprises viewing informal competition as a severe obstacle have lower levels of firm performance compared with those who do not view informal competition as a severe obstacle. To do so, the results from 360 face-to-face interviews conducted with a representative sample of entrepreneurs in Bosnia and Herzegovina in 2019 are reported.

To commence, the next section briefly reviews the extensive literature on informal sector entrepreneurship, drawing attention to how it focuses upon the negative impacts of such endeavors. It then focuses upon the relationship between informal entrepreneurship and firm performance. This highlights again how enterprises witnessing informal competition are assumed to suffer from lower levels of firm performance, despite a lack of strong empirical evidence that this is the case. To provide an evidence-based evaluation of whether enterprises witnessing informal sector competition witness lower performance, the third section introduces the data, namely a 2019 survey of a representative sample of 360 enterprises in Bosnia and Herzegovina, and the analytical methods. The fourth section then presents the results while the fifth and final section discusses the implications for theory and policy coupled with the limitations of this study and future research that could be undertaken.

2. Informal Entrepreneurship and Firm Performance

Reviewing the extensive literature on informal sector entrepreneurship, this section will reveal that the dominant depiction is that informal sector entrepreneurship is an overwhelmingly negative phenomenon in terms of its impacts. Focusing upon the relationship between informal entrepreneurship and firm performance, a negative depiction is shown again to prevail. Formal enterprises witnessing informal competition are assumed to suffer from lower levels of firm performance than those that do not. The outcome will be to set out a number of hypotheses to be tested to begin to put the widespread assumption that informal entrepreneurship has negative impacts under the microscope of evidence-based evaluation.

2.1. *Depictions of the impacts of informal entrepreneurship*

Until the later decades of the twentieth century, few scholars of entrepreneurship examined entrepreneurship and enterprise in the informal sector. This was widely perceived as a leftover from an earlier production regime that would disappear naturally and inevitably with economic development and growth (Lewis, 1959; Geertz, 1963; Gilbert, 1998). The recognition that the informal sector is a persistent and extensive phenomenon (Schneider and Williams, 2013; ILO, 2018; Williams, 2015a, b; Williams and Kosta, 2019; Williams and Liu, 2019) and that over half of all enterprises globally operate unregistered (Acs *et al*., 2013), has led to a growing interest in such entrepreneurship.

Reviewing the depictions of informal entrepreneurship in all the dominant theorizations, what becomes apparent quickly is that there is an overwhelming focus on the negative impacts of such endeavors. In conventional modernization theory (La Porta and Shleifer, 2008, 2014), the representation of informal entrepreneurs is that they are typically uneducated people and that informal enterprises are small unproductive enterprises that operate in separate "bottom of the pyramid" markets producing low-quality products for low-income consumers using little capital and adding little value (La Porta and Shleifer, 2014). Meanwhile, political economy theorists explain the growth of informal entrepreneurship to be a direct result of a deregulated open world economy where outsourcing and subcontracting bring informal enterprises into contemporary capitalism to reduce production costs (Castells and Portes, 1989; Davis, 2006; Meagher, 2010; Slavnic, 2010; Taiwo, 2013). Hence, for these scholars, informal enterprises are low-productivity enterprises operated by necessity-driven entrepreneurs, requiring low levels of start-up capital. However, the cost advantages that result from the evasion of taxes and regulations allow them to offset their low productivity and small scale (Farrell, 2004; Palmer, 2007).

Therefore, in both the modernization and political economy theories, the focus is upon the negative impacts of informal entrepreneurship. Table 1 summarizes the various depictions of the negative impacts of informal entrepreneurship and enterprise in these theories by reviewing its negative impacts on informal entrepreneurs, formal entrepreneurs, customers and governments.

Nevertheless, and as Table 1 reveals, some more positive impacts of informal entrepreneurship have begun to emerge, such as the view of the informal sector as a test-bed for business ventures (Williams and Martinez-Perez, 2014a). The stimulus for these positive depictions is the recognition that informal entrepreneurship can be a matter of choice rather than always a necessity-driven endeavor (Franck, 2012; Gërxhani, 2004; Maloney, 2004; Perry and Maloney, 2007; Williams, 2009; Williams and Gurtoo, 2012; Williams and Youssef, 2015). On the one hand, a "legalist" perspective has viewed informal entrepreneurs and enterprises as rational economic actors who choose to operate in the informal sector when the costs of formalization (e.g., time to register, burdensome regulations) exceed the benefits (Cross, 2000; De Soto, 1989, 2001; Nwabuzor, 2005). On the other hand, and based on a variant of institutional theory (North, 1990), a "social actor" perspective portrays informal entrepreneurship as a chosen endeavor that arises when the norms, values and beliefs of entrepreneurs do not align with the laws and regulations (De Castro *et al*., 2014; Kistruck *et al*., 2015; Siqueira *et al*., 2014; Vu, 2014; Webb *et al*., 2013, 2014). The greater is this asymmetry, the more prevalent is informal entrepreneurship (Williams and Horodnic, 2015; Williams and Shahid, 2015).

Table 1. Depictions of the negative and positive impacts of informal entrepreneurship

Negative impacts	Positive impacts
Impacts on informal entrepreneurs:	
Lack access to capital, credit and financial services to grow, partly because of limited credit history (ILO, 2014). Need to keep business small to stay 'under the radar' of the authorities (Williams *et al*., 2012). Higher barriers of entry to formal markets because of inability to provide employment history to back up their skills (ILO, 2014). Cannot secure formal intellectual property rights to process and product innovations (De Beer *et al*., 2013). Lack ability to develop because of lack of support available (ILO, 2014; Karjanen, 2014; Williams *et al*., 2012).	A source of income to stay out of poverty. Flexibility in where, when and how to work (especially important for women who remain responsible for child-care). Reduces barriers to entry into work because the majority of informal work starts with close social relations. Provides an alternative when the values, norms and beliefs of entrepreneurs do not align with the codified laws and regulations of formal institutions (Webb *et al*., 2009, 2013).
Impacts on formal entrepreneurs:	
Unfair competitive advantage for informal over formal entrepreneurs (Andrews *et al*., 2011; Karlinger, 2013). De-regulatory culture results enticing law-abiding entrepreneurs into a 'race to the bottom' away from regulatory compliance (Gallin, 2001). 'Hyper-casualization' as more formal entrepreneurs are driven into the informal entrepreneurship to compete. Harms performance of formal enterprise because of unfair competition (La Porta and Shleifer, 2008).	Provides entrepreneurs with escape route from corrupt public sector officials (Tonoyan *et al*., 2010). Provides exit strategy in contexts where regulatory burden stifles business development (De Soto, 1989). Cheap source of labor and raw materials for formal firms and reduces production costs through outsourcing and subcontracting to informal enterprises (Ketchen *et al*., 2014).
Impacts on customers:	
Lack legal recourse if a poor job is done, insurance cover, guarantees and certainty that health and safety regulations have been followed (Small Business Council, 2004; Williams *et al*., 2012). Informal enterprises are inefficient and incapable of charging lower prices for the same products and services (La Porta and Schleifer, 2014).	More affordable product or service can be offered to or asked for by customers if payment is made in cash and no receipts change hands (Ketchen *et al*., 2014).

Table 1 (continued). Depictions of the negative and positive impacts of informal entrepreneurship

Negative impacts	Positive impacts
Impacts on governments:	
Causes loss of tax revenue for state (Müller and Miggelbrink, 2014; Sauka *et al*., 2016)	Income from informal entrepreneurship spent in formal economy boosts demand for formal goods and services and contributes to 'official' economic growth and employment (Ketchen *et al*., 2014).
Reduces state's ability to achieve social cohesion by reducing money available (Andrews *et al*., 2011)	
Loss of regulatory control over work conditions (ILO, 2014)	'On the job' training in informal enterprises alleviates pressure on state.
Encourages casual attitude toward the law more widely (Dong *et al*., 2012; Karjanen, 2014; Ojo *et al*., 2013; Sasunkevich, 2014)	Breeding ground for the micro-enterprise system (De Soto, 1989; Williams and Martinez, 2014).
Cost advantages gained by avoiding taxes and regulations offsets their low productivity and small scale, with negative effects for economic development and growth (Woodruff, 2013).	Test-bed for fledgling businesses (Williams and Martinez-Perez, 2014). Challenges the laws and regulations of formal institutions (Webb *et al*., 2013).

Despite this plethora of negative and positive impacts of informal entrepreneurship, entrepreneurship scholarship has seldom provided evidence-based evaluations of these impacts in lived practice in different contexts to determine whether they are valid and if so, their extent. This lacuna in scholarship needs to be filled. An exemplar of how there are strong statements on the impacts of informal entrepreneurship but "thin empirics" is the widespread belief that formal enterprises witnessing informal competition will suffer from lower levels of firm performance than those who do not.

2.2. *Impacts of informal sector competition on performance of formal enterprises*

Although it is widely assumed that informal sector competition has a negative impact on the performance of formal enterprises, there currently exists little, if any, evidence-base that informal sector competition reduces the firm performance of formal enterprises.

Instead, such an assumption is based on the evidence-base that displays the poor performance of informal sector enterprises, which it is assumed has a negative impact on the firm performance of formal enterprises. However, even this evidence-base about the poorer performance of informal sector enterprises is weak. The study most commonly cited as evidence of the poorer performance of informal enterprises is by La Porta and Shleifer (2008). This reports World Bank Informal Surveys conducted in thirteen countries and Micro Enterprise Surveys in fourteen countries, comprising a total sample of 2,321 registered and 3,574 unregistered enterprises. The finding is that unregistered enterprises perform poorer than registered enterprises. However, statistically significant differences in the performance of registered and unregistered enterprises existed in only ten of the 25 countries, seventeen of the 26 countries on sales per employee, and in eighteen of the 26 countries on output per employee. Indeed, and contrary to the poorer performance thesis of informal enterprises, unregistered enterprises outperformed registered enterprises in six of the 25 countries on value added per employee, three of the 26 countries on sales per employee and four of the 26 on output per employee (see La Porta and Shleifer, 2008: Tables 13 and 14). Even more importantly, and hidden in a footnote, La Porta and Shleifer (2008) state unregistered firms are not more unproductive once one takes into account control variables (e.g., expenditure on inputs, the human capital of their top managers and their small size). The evidence in other studies of the poorer performance of informal enterprises is similarly weak (Fajnzylber *et al.*, 2009; Farrell, 2004; McKinsey Global Institute, 2003). Fajnzylber *et al.* (2009) claim that Mexican firms paying taxes exhibit between fifteen to 60 percent higher "productivity" levels, but they do not control for many firm-level determinants of firm performance.

Meanwhile, examining the poorer performance of formal enterprises starting-up unregistered compared with enterprises registered from the outset of operations, Perry and Maloney (2007) report World Bank survey data on 355 unregistered startups across seven Latin American countries. They identify overall the poorer performance of unregistered start-ups. However, besides only a small sample, the productivity gap identified is statistically significant in only four of the seven countries studied. More recently, more extensive datasets have been used to examine the firm performance of unregistered startups in various individual countries (e.g., India, South Africa) and cross-nationally. These reveal that formal enterprises that start-up unregistered have higher subsequent levels of firm performance than those starting-up on a registered basis (Williams and Kedir, 2016, 2017a, b, 2018a, b, c). To explain this, the argument is that unregistered enterprises initially avoiding the costs of registration and focusing on other liabilities of newness, establish a stronger foundation for subsequent growth (Williams *et al.*, 2017).

However, all this literature is on how informal sector enterprises display lower levels of performance. When looking at whether formal enterprises who view their competitors operating in informal sector as a severe obstacle suffer from lower levels of firm performance, little evidence has been produced until now that this is the case. The only known exception is a study of 1,430 enterprises in Bulgaria, Croatia and FYR Macedonia (Williams and Bezeredi, 2018). The finding is that enterprises asserting that their competitors participate in the informal sector have significantly lower real annual sales growth rates compared with those who assert that their competitors do not participate in the informal sector. However, other measures of firm performance such as annual employment growth and annual productivity growth are not considered. Therefore, to evaluate this view using a wider range of indicators of firm performance, the following hypotheses can be tested:

H1: Enterprises who view informal competitors as a severe obstacle suffer from lower levels of annual sales growth than those who do not.

H2: Enterprises who view informal competitors as a severe obstacle suffer from lower levels of annual productivity growth than those who do not.

H3: Enterprises who view informal competitors as a severe obstacle suffer from lower levels of annual employment growth than those who do not.

3. Data, Variables and Methods

3.1. *Data*

To evaluate the impact of informal sector competition on the performance of formal enterprises, a WBES survey conducted in 2019 in Bosnia and Herzegovina is reported. This collects data using face-to-face interviews from 360 formal enterprises with five or more employees using a stratified random sample. This uses three criteria for the stratification: industry, firm size and region. It defines industry stratification as follows: manufacturing, retail and other services. It defines firm size using the number of employees. Small firms refer to those with 5-19 employees, medium firms refer to those with 20-99 employees and large firms refer to those with more than 100 employees. Regional stratification was done across five regions: Bosna region, Hercegovina region, Sarajevo region, Republika Srpska and Distrikt Brcko. For the purposes of achieving the thresholds for representativeness (e.g., on firm size categories), it was necessary in some cases to combine regions. More specifically, the Bosna and Hercegovina regions are combined, as well as Republika Srpska and Distrikt Brcko regions. The sample frame consisted of the list of 360 firms from the Bosnia and Herzegovina 2013 WBES and for new firms (i.e., firms not covered in 2013), the LRC Business Intelligence System was used to select enterprises to be surveyed.

3.2. *Variables*

3.2.1. *Dependent variables*

Firm performance is measured using three indicators. First, real annual sales growth (using GDP deflators) (%) is used. Sales are converted first in U.S. dollars (USD) using the exchange rate of two fiscal years. Then, they are deflated to 2009 utilizing the USD deflator. Second, annual employment growth (%) is used, which is calculated as the change in full-time employment reported in the current fiscal year from a previous period. Third and finally, annual productivity growth (%) is used, which measures the labor productivity growth on annual basis where labor productivity is real sales (using GDP deflators) divided by the number of full-time permanent employees. To calculate the growth, the change between labor productivity reported in the current fiscal year from a previous period is performed. All three of these performance measures are expressed in terms of logs.

3.2.2. *Independent variables*

To evaluate the impact of informal competition on the performance of formal enterprises, we examine whether informal competition is perceived as a severe obstacle to operations by formal enterprises. This is based on answers to the question: "*To what degree are practices of competitors in the informal sector an obstacle to the current operations of your establishment?"* where 4 denotes that informal competition represents a severe obstacle, 3 a major obstacle, 2 a moderate obstacle, 1 a minor obstacle and 0 no obstacle. This variable is recoded into a dummy variable with 1 meaning that informal competition represents a very severe obstacle and 0 otherwise.

3.2.3. *Control variables*

To control for other determinants of firm performance, a series of other variables are used based on previous studies (Williams and Bezeredi, 2018; Williams *et al*., 2017). These are:

- *Firm size:* a categorical variable that classifies businesses by the number of employees with value 1 for small firms with 5-19 employees, value 2 for medium firms with 20 and 99 employees, and value 3 for large firms with more than 100 employees.
- *Firm ownership:* a dummy variable that takes value 1 if more than 49 percent of the firm is owned by foreign individuals and 0 otherwise.
- *Export-orientation*: a dummy variable that takes value 1 if at least 1 percent of firm's sales comes from export and value 0 otherwise.
- *Innovation*: Innovation is measured through product and process innovation. Product innovation is a dummy variable that takes value 1 if a firm has introduced new or improved products or services during the three years and takes value 0 otherwise. Process innovation is a dummy variable that takes value 1 if a firm has introduced new or improved processes during the last three years and value 0 otherwise.
- *Business environment constraints:* transport, access to credit and electricity are three business environment constraints that influence firm performance. All of them are dummy variables that take value 1 if they represent a major constraint to business's activity and 0 otherwise.
- *Legal status:* a categorical variable describing the legal status of a company: 1=Shareholding company with shares trade in the stock market, 2=Shareholding company with non-traded shares or shares traded privately, 3=Sole proprietorship, 4=Partnership, 5=Limited partnership.

3.3. *Modeling framework*

To estimate the impact of informal competition on the performance of formal enterprises, a linear regression model is employed. All the linear regression model assumptions were preliminary checked. Dependent variables were not normally distributed. So, annual sales growth, annual productivity growth and annual employment growth are expressed in terms of logs. The following econometric model represents the final pattern where pi* represents firm I's performance (i.e., measured by sales, employment and productivity growth) the β0 represents the intercept, Xi represents the vector of independent variable and εi represents the error term.

$$p_i^* = \beta 0 + \beta 1Xi + \ldots \beta_n n + \varepsilon i$$

4. Findings

The finding is that 9.3 percent of all formal enterprises assert that informal competition represents a very severe obstacle to the operations of their business. To evaluate the impact of informal sector competition on the performance of formal enterprises, Table 2 reports the results of the linear regression analysis of the formal enterprises interviewed in Bosnia and Herzegovina. Three models evaluate whether formal enterprises that view informal competition as a very severe obstacle for current operations of their establishment suffer from lower levels of firm performance in terms of first, sales growth, second, productivity growth and third, employment growth.

However, before analyzing this, it is useful to briefly review the variables influencing firm performance beyond informal sector competition. Examining the determinants of sales growth, the finding is that significant associations are whether the legal status is a sole proprietorship and firm size. Sole proprietorships in model 1 are negatively and significantly associated in terms of annual sales growth relative to limited partnerships, as are small firms relative to medium sized firms. Meanwhile, exporting enterprises are significantly more likely to have higher annual sales growth than non-exporting enterprises. Annual productivity growth rates again are significantly lower in sole proprietorships while annual employment growth rates are significantly higher in shareholding companies with non-traded shares or shares traded privately, and significantly lower in larger firms. None of the other control variables are significantly associated with firm performance, including foreign ownership, innovation, and whether credit access, transport or electricity are constraints on operations.

Table 2. Determinants of firm performance in Bosnia and Herzegovina, 2019

	Model 1: Log (sales growth)		Model 2: Log (productivity growth)		Model 3: Log (employment growth)	
	B	Std. Error	B	Std. Error	B	Std. Error
Informal competitors severe obstacle	.403	.129***	.233	.148	-.068	.111
Exporter	.122	.074*	.074	.096	.094	.063
Foreign ownership	.024	.108	-.047	.148	.013	.085
Major constraints*:*						
Credit access	.046	.077	-.092	.095	.074	.065
Transport constraint	-.142	.377	-.050	.453	.053	.242
Electricity constraint	.005	.125	-.017	.184	.003	.105
Innovation:						
Product innovation	.036	.083	.050	.104	.023	.073
Process innovation	.062	.085	-.046	.107	.033	.071
Legal status (RC: Limited partnership):						
Shareholding company with shares trade in the stock market	-.064	.086	-.101	.112	-.062	.076
Shareholding company with non-traded shares or shares traded privately	-.164	.178	-.026	.269	.477	.150***
Sole proprietorship	-.612	.185***	-.433	.208**	.059	.198
Partnership	.132	.106	.087	.129	-.091	.089
Firm size (RC: medium):						
Large	.027	.093	-.023	.122	-.149	.072**
Small	-.153	.085*	-.045	.105	.064	.079
Constant	-1.118	.099***	-1.028	.118***	-1.115	.085***
R-squared	.196		.072		.153	
No of observations	201		159		163	

*Standard errors in parentheses: ***p < 0.01, **p < 0.05, *p < 0.1.*
Source: authors' calculations from World Bank Enterprise Survey 2019

Turning to the relationship between informal competition and firm performance, model 1 displays that formal enterprises viewing informal competition as a very severe obstacle, better perform in terms of annual sales growth. This refutes H1. One possible explanation, grounded in the liabilities of newness thesis (Stinchcombe, 1965), is that customers prefer to source goods and services from enterprises displaying legitimacy (Scott, 2008), which refers to "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions" (Suchman, 1995). Formal enterprises display legitimacy because formality reveals that an enterprise complies with laws and regulations, such as paying taxes and has the appropriate licenses and certifications (Kistruck *et al.*, 2015; Webb *et al.*, 2009), signaling stability, quality and/or prestige (Bitekine, 2011; Suchman, 1995). Informal sector competitors, conversely, lack such legitimacy, which leads customers to be less inclined to use them, resulting in the significantly higher annual sales growth of formal enterprises witnessing informal competition because they gain a higher proportion of sales than those in spheres where such informal competition is not a severe obstacle.

Meanwhile, examining the other measures of firm performance, model 2 shows that there is no significant relationship between whether a formal enterprise witnesses severe competition from informal enterprises and annual productivity growth. Therefore, this refutes H2 that enterprises who view informal competitors as a severe obstacle suffer from lower levels of annual productivity growth than those who do not. Furthermore, model 3 reveals there is no significant association between informal competition and annual employment growth rates. This refutes H3 that enterprises who view informal competitors as a severe obstacle suffer from lower levels of annual employment growth than those who do not.

5. Discussion and Conclusions

Reporting data from interviews with 360 formal enterprises in Bosnia and Herzegovina collected in 2019, the finding is that formal enterprises who view informal competitors as a severe obstacle do not display lower sales growth, employment growth or productivity growth than those who do not. Indeed, such enterprises witness significantly higher sales growth than those not viewing informal sector competitors as a severe obstacle. As such, this study in Bosnia and Herzegovina provides evidence to refute the widely held assumption that informal sector enterprises have a deleterious impact on the performance of formal enterprises.

This finding has two important theoretical implications. On the one hand, it advances understanding of the impacts of informal sector enterprise on the performance of formal enterprises. It reveals, contrary to the widespread assumption in the literature, that there is no significant association between the performance of formal enterprises who view informal sector competitors as a severe obstacle to their operations and those who do not. Therefore, theoretically, this study provides no validation for the thesis that informal sector competitors have a negative impact on the performance of formal enterprises. On the other hand, and more widely, this evidence-based evaluation that refutes a widely-held view about the negative impact of informal sector enterprises on formal enterprises strongly suggests that other negative depictions of informal sector enterprise and entrepreneurship now need to be put under the spotlight. These include the negative depictions of informal entrepreneurship and enterprise as unproductive compared with formal entrepreneurship and enterprise, as confined to “bottom of the pyramid” markets, and as producing and selling inferior products and services. In other words, it is time for all the negative (and positive) depictions to be subjected to evidence-based evaluation so a more nuanced theorization of the impacts of informal enterprise and entrepreneurship can emerge.

This study also has important policy implications. One of the major reasons for governments pursuing the eradication of informal enterprise and entrepreneurship is because of its supposed deleterious impact on the development and growth of formal enterprises. However, this study finds this is not the case in Bosnia and Herzegovina. This tentatively intimates that there might be a need to adopt a less negative view of the role of informal enterprises. There might even be a need for more positive depictions of the informal sector such as the view that it is a test-bed where entrepreneurs explore the feasibility of their business ventures. If proven correct, then policy initiatives would be needed that support a more gradual transition from informality to formality.

Nevertheless, there are limitations to this study. It is a study of only one country. Therefore, whether such findings are more widely applicable needs to be tested. This wider research could also include interviews with informal sector enterprises to enable a comparison of the firm performance of formal and informal sector enterprises, and allow the reasons why such enterprises operate in the informal sector to be investigated and the barriers that prevent them operating on a formal basis.

In sum, this paper has revealed that formal enterprises who view informal sector competition as a severe obstacle on their operations do not suffer worse firm performance than those who do not view informal sector competition as a severe obstacle. This raises questions about the deleterious impacts of informal sector enterprises on the formal sector. If this now stimulates similar research in other countries and global regions, and includes informal enterprises to allow a comparison of firm performance in formal and informal enterprises, then one intention will have been fulfilled. If it also leads to evidence-based evaluations of other commonly held negative depictions of informal sector enterprise and entrepreneurship, and further reflection on the policy initiatives required in relation to informal sector enterprise and entrepreneurship, then this paper will have achieved its fuller intention.

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